REMARKS

Claims 71-79, 81-83, 85-90, and 92-115 are pending. Claims 71, 72, 83, 94, 96, and 109-115 are currently amended.

Reconsideration of the application, as amended, is requested.

Support for the amendment to claim 112, with respect to the substrate being "single-layer" can be found in the specification, for example, page 5, lines 27-28, page 11, which lists various single-layer substrates, and Examples 6-11 and 13, which use single-layer substrates, and Fig. 1.

Support for the amendments to claims 110 and 114-115 with respect to the limitations that the second major side of the substrate is at least partially exposed can be found in the specification, for example, in Figs. 1-2, and at page 5, lines 17-22.

Support for the amendments to claims 109, 110, 111, and 115 with respect to the discrete polymeric regions being substantially circular can be found in the specification, for example, page 6, line 16, in the Examples, and in Fig. 3.

§ 112 Rejections

Claims 71-79, 81-83, 85-90 and 92-115 are rejected under 35 USC § 112, first paragraph, as failing to comply with the written description requirement.

The Office Action states:

> The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "the polymer forming the polymeric regions does not extend *through* the substrate" (independent claims 7 1, 83,94, 109-1 15) wherein the substrate containing ***loop*** structures (claims 73, 87, 97, 111, 113-115) is a **fibrous** (Claims 75, 88, 94, 111, 113-115) or a **porous** material (Claims 76, 89, 99) of e.g. **non-woven** material (Claims 78, 101) or **elastic** web (Claims 72, 83,96, 110) such as a **woven** web (Claims 77, 100) and a **knit** web (Claims 79, 102), was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s),

> at the time the application was filed, had possession of the claimed invention. The Applicants' specification discloses that the source 53 deposits the **melted** polymeric material on the web 50 as discrete portions 55; the portions 55 are simultaneously pressed into the cavities and fused to the web 50, and a casting roll 58 provides **pressure** against the back side of the web 50 as the polymeric material cools, thereby assisting- in **pressing** the polymeric material into the cavities in tooled surface 57 of tool roll 56 and fusing of the polymeric material to the web 50 (See Fig. 5 and page 8 , lines 4-7). However, the Applicants' specification discloses ***nowhere*** that the melted polymer does not go through the **porous** material, **fibrous** material, the **woven** web or the **knit** web under the ***pressure*** of roll 58 against the roll 57.

The undersigned thanks the Examiner for clarifying that although claims 71-79, 81-83, 85-90, 92-108, 112, and 113 do not have the limitation "the polymer forming the polymeric regions does not extend *through* the substrate", they are still rejected under these grounds because they either have the limitation "wherein the polymer forming the discrete patches is not present on the second major side of the substrate" or "wherein the second major side of the substrate is free of the polymer making up the plurality of discrete polymeric regions". The clarification was made in a telephone discussion between the Examiner and the undersigned on March 2, 2009, in which the Examiner explained that the rejection was applied to claims 71-79, 81-83, 85-90, 92-108, 112, and 113 for the same reasons given in the paragraph reproduced above.

Although Applicants do not necessarily agree with the rejection, claims 71, 83, 94, 109, 110, 112, 114, and 115 have been amended, without prejudice, to eliminate the limitations "the polymer forming the polymeric regions does not extend *through* the substrate", "wherein the polymer forming the discrete patches is not present on the second major side of the substrate", or "wherein the second major side of the substrate is free of the polymer making up the plurality of discrete polymeric regions".

In summary, Applicants submit that the rejection of claims 71-79, 81-83, 85-90, and 92-115 under 35 USC § 112, first paragraph, has been overcome, and that the rejection should be withdrawn.

Claims 71-79, 81-83, 85-90, and 92-115 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

The Office Action States:

> The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The limitation "the polymer forming the polymeric regions does not extend through the substrate" (independent claims 7 1, 83, 94, 109- 115), wherein the substrate is **porous** material, a **fibrous** material, a **woven** web or a **knit** web, was not described in the specification in such a way as to enable one skilled in the art to prevent the melted polymer to go through the **fibrous** material, the **woven** web or the **knit** web under the ***pressure*** of roll 58 against the roll 57.

The undersigned thanks the Examiner for clarifying that although claims 71-79, 81-83, 85-90, 92-108, 112, and 113 do not have the limitation "the polymer forming the polymeric regions does not extend *through* the substrate", they are still rejected under these grounds because they either have the limitation "wherein the polymer forming the discrete patches is not present on the second major side of the substrate" or "wherein the second major side of the substrate is free of the polymer making up the plurality of discrete polymeric regions". The clarification was made in a telephone discussion between the Examiner and the undersigned on March 2, 2009, in which the Examiner explained that the rejection was applied to claims 71-79, 81-83, 85-90, 92-108, 112, and 113 for the same reasons given in the paragraph reproduced above.

Although Applicants do not necessarily agree with the rejection, claims 71, 83, 94, 109, 110, 112, 114, and 115 have been amended, without prejudice, to eliminate the limitations "the polymer forming the polymeric regions does not extend *through* the substrate", "wherein the polymer forming the discrete patches is not present on the second major side of the substrate", or "wherein the second major side of the substrate is free of the polymer making up the plurality of discrete polymeric regions".

In summary, Applicants submit that the rejection of claims 71-79, 81-83, 85-90, and 92-115 under 35 USC § 112, first paragraph, has been overcome, and that the rejection should be withdrawn.

§ 103 Rejections

Claims 109, 111, and 114-115 were rejected under 35 USC § 103(a) as being unpatentable over Wessels et al (US 5,669,120).

Applicants submit that the Office Action does not present a proper *prima facie* case of obviousness because (1) the cited art does not include each of the elements of the claims, and (2) the Office Action provides an insufficient rationale why a person having ordinary skill in the art would modify the cited art to obtain Applicants' claimed invention.

The cited art does not include each of the elements of the claims

One example of an element that is not present in the cited art is a fibrous nonwoven web. Applicants' claims 114-115 recite a fibrous nonwoven web. Wessels et al. does not disclose fibrous nonwoven webs but only teaches knit and woven materials. Also, with regard to the rejection of claims 114-115 based on Wessels et al. alone, the Office Action does not provide a rationale for modifying the teachings of Wessels et al. to obtain a web construction comprising a fibrous nonwoven web. For at least this reason, Applicants request withdrawal of the rejection of claims 114-115 as being unpatentable over Wessels et al.

Another example of a claim element that is not present in the cited art is a plurality of discrete polymeric regions comprising a discrete patch of polymer having a perimeter that is entirely surrounded or bordered by a first major side of the nonwoven web, as recited in claims 114. The discrete patch is defined as a substantially circular patch of polymer in amended claims 109, 111, and 115. The plurality of discrete polymeric regions is also recited as each having a plurality of stems extending from each discrete polymeric region. As admitted in Office Action dated 1-18-2007, Wessels et al. does not expressly teach discrete patches of polymer having a perimeter that is entirely bordered by the first major side of the substrate. Wessels et al. does not teach the more specific case of a substantially circular patch of polymer either.

The advantages of discrete patches having a perimeter that is entirely bordered or surrounded by the first major side of the substrate (e.g., substantially circular discrete patches), are described in the specification. For example, such discrete patches may require the use of less raw material (page 10, lines 3-4), offering a manufacturing and cost advantage. Also, such

discrete patches allow the web construction to be breathable (i.e., porous) and elastic or flexible in all directions so that they can be wrapped around an object in either direction (see, e.g., page 13, lines 15-17).

The Office Action provides an insufficient rationale why a person having ordinary skill in the art would modify the cited art to obtain Applicants' claimed invention

As a rationale for why a person of ordinary skill in the art would have modified Wessels et al. to obtain Applicants claimed web construction having a plurality of discrete polymeric regions comprising a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate, previous Office Actions stated it would have been an obvious matter of design choice and cited the teachings of column 10, lines 53-60 of Wessels et al. (shown below) as support for an assertion that Wessels et al. discloses or suggests changing the shape and/or spacing of the hook elements.

> Further, since the pile core sheet is manufactured by weaving or knitting, it is possible to change the design of the pile core sheet in arrangement and orientation of piles and to determine the size, shape or arrangement of hook elements optionally. It is accordingly possible to cope instantly with various requirements for the surface fastener in which hook and loop elements coexist.

However, this paragraph should be considered in light of the teachings of Wessels et al. as a whole. As stated in the MPEP 2141.02 section VI, "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." Applicants submit that as a whole, the disclosure of Wessels et al. teaches away from region of hooks that are not continuous. And a discrete patch of polymer having a perimeter that is entirely bordered by the first major side of the substrate or a substantially circular discrete patch of polymer, as claimed in Applicants claims 109, 111, 114, and 115, are regions that are not continuous. In fact, in at least three ways, Wessels et al. teaches away from regions of hook elements that are not continuous.

Firstly, the only shape Wessels et al. teaches for both the first embodiment and the second embodiment of surface fasteners is a continuous stripe or row of hook elements (see, e.g., Figs. 2, 3, 6, 7, and 8). Even the surface fasteners shown in Figs. 7 and 8, which are mentioned in Wessels et al. (col. 9, line 38) as having a particular shape, have a configuration of hooks in

stripes or rows. Thus, the entire disclosure of Wessels et al. is focused on how to form continuous stripes or rows of polymer hooks.

Secondly, Wessels et al. teaches away from regions of hook elements that are not continuous in its discussion of methods of making the surface fasteners. Wessels et al. teaches articles in which a surface fastener is formed by passing a substrate S through a continuous injection molding or continuous extrusion apparatus to form a continuous web that includes continuous fastener regions. The continuous nature of these methods is discussed throughout the disclosure. Wessels et al. teaches two types of surface fasteners in col. 3, lines 24-35, where it states:

> Further, in the surface fastener of this invention, the foundation structure of the pile woven or knit cloth is a coarse woven or knit structure having pores large enough to pass molten resin material throughout its entire area, and the hook and loop elements exist mixedly on the one surface of the substrate sheet. In an alternative form, the foundation structure of the pile woven or knit cloth is high in density at its pile areas and has a coarse woven or knit structure at the remaining areas coarse enough to pass molten resin material. Further the hook elements and the loop elements may be arranged alternately in parallel predetermined regions on the one surface of the substrate sheet.

Both of these types require continuous regions of hook elements. In the following discussion, the type of surface fastener in which the pores of the knit or woven material are large enough to pass molten resin throughout its entire area is referred to as the "first type", and the type of surface fastener described as "an alternative form" is referred to as the "second type".

In the case of the second type, the continuous fastener regions are bordered on one or two sides by the substrate S (i.e., the fastener regions are provided in the form of continuous stripes that extend along the length of the web). In the case of the first type, which requires that the pores of the knit or woven material are large enough to pass molten resin throughout its *entire* area, Applicants submit that the teaching is consistent with areas of knit or woven material which are entirely surrounded by the polymer used to form the hook regions (see, e.g., Figs. 7 and 8). This embodiment can be considered to be the opposite of what applicants are claiming.

Since the methods (i.e., continuous injection molding and continuous extrusion) used in Wessels et al. are referred to as continuous processes throughout the entire disclosure, a person skilled in the art would not have concluded that changing the configuration of the polymeric

regions of Wessels et al. from continuous regions to discrete regions that are substantially circular or have a perimeter that is entirely bordered by the substrate was an obvious matter of design choice, as asserted in the Office Action. No part of the disclosure of Wessels et al. teaches or suggests that the apparatus and methods disclosed therein could be used to provide the discrete patches (or substantially circular patches) recited in each of independent claims 109, 111, 114, and 115. A change from the continuous hook regions of Wessels et al. to the discrete patches of the claimed invention would require a change in basic operating principles of the continuous injection molding and continuous extrusion apparatuses and methods. Such a change would be contrary to a stated object of Wessels et al.: "using a simple molding apparatus without any reconstruction" (col. 2, lines 58-59).

Thirdly, Wessels et al. teaches away from using the second type of surface fastener when a change in the shape of surface fasteners is desired, thereby teaching away from any discrete region of hook-forming polymer on sheet S. Other than col. 10, lines 53-60, the only other disclosure in Wessels et al. that mentions shape in connection with the surface fastener is the discussion of the surface fasteners shown in FIGS. 7 and 8 in col. 9, lines 31-42. With regard to these types of surface fasteners, it is stated in col. 9, lines 37-42:

> "For manufacturing the surface fasteners of these shapes shown in FIGS. 7 and 8, each pile core sheet S must have a coarse foundation structure having adequate pores enough to allow molten resin 4 to pass through, and the piles must be formed in a predetermined arrangement at predetermined intervals."

This statement teaches that the methods for making the first type of surface fasteners taught in Wessels et al. *must* be used to make the "shapes" shown in FIGS. 7 and 8. Since the pile core sheet S *must* allow the molten resin to pass through, these surface fasteners have piles that are completely surrounded by resin – again essentially the opposite of what Applicants are claiming. These surface fasteners do not have discrete polymeric regions comprising a substantially circular patch or a discrete patch that is entirely bordered by the first major side of the substrate S, with a plurality of stems extending from each discrete polymeric region of the plurality of polymeric regions. Furthermore, the variations in "size, shape or arrangement" discussed by Wessels et al. are discussed for the hook elements themselves on the continuous regions – not for the size and/or shape of polymeric regions that contain the hooks.

Since Wessels et al. teaches away from web constructions having "a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate" or a "substantially circular patch", obviousness cannot be proven merely by stating that the continuous stripes of polymer taught by Wessels et al. could have been modified as a matter of design choice. Moreover, the Office Action has provided insufficient evidence that a person having skill in the art would modify the continuous methods and apparatuses to obtain a construction as claimed in claims 109, 111, 114, and 115.

In view of the above remarks, Applicants submit that a proper *prima facie* case of obviousness has not been made for the rejection of claims 109, 111, and 114-115 under 35 USC § 103(a) as being unpatentable over Wessels et al. (US5,669,120) and request withdrawal of the rejection.

Since each of amended independent claims 71, 83, 94, 110, 112, and 113 also include either the limitation "a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate" or a "substantially circular patch", each of these independent claims is patentable over Wessels et al. as well.

Claims 71-79, 81-83, 86-90, 92-106, and 108-115 were rejected under 35 USC § 103(a) as being unpatentable over Wessels et al in view of Allen et al.

Since each of claims 71-79, 81-83, 86-90, 92-106, 108-111, and 113-115 recite a plurality of discrete polymeric regions comprising either a discrete patch of polymer that has a perimeter that is entirely bordered by a first major side of the substrate or a substantially circular patch of polymer, the arguments presented above against the rejection of claims 109, 111, 114, and 115 are applicable to the present rejection as well. Although the Office Action states that previous arguments with respect to this limitation against the rejection of claims 71-79, 81-83, 86-90, 92-106, and 108-115 were "unconvincing because Applicants did not address in any meaningful manner Wessels et al combined with Allen", Allen et al. has never been relied upon for the limitation of a plurality of discrete polymeric regions comprising a discrete patch having a perimeter that is entirely bordered by a first major side of the substrate. Allen et al. does not change the teaching away of Wessels et al. described above with respect to this limitation.

Therefore, Applicants respectfully request consideration of the arguments presented above against the rejection based on Wessels et al. in view of Allen et al.

In addition, claims 112-115 are amended to further define the substrate. Claim 112 recites that the substrate in the web construction is "single-layer". The substrate of Wessels et al., could not be considered to be "single-layer" at least because the disclosure requires that the surface fastener has a pile woven or knit core sheet S as one layer and a thermoplastic resin used to embed the core sheet and form the hook elements, providing more than one layer. Wessels et al. requires that the hook-forming material is present as a layer 4a on the surface opposite the surface having hooks. Allen et al. also teaches multi-layer structures, which in that case are made by extruding an elastomeric adhesive film, stretching this elastomeric adhesive film, point bonding this elastomeric adhesive film to a nonwoven and then relaxing the laminate so the nonwoven shirrs up to form hook “catching regions”. Therefore, the construction of Wessels et al. in combination with Allen et al. requires several layers of different materials and cannot be considered "single-layer".

Claims 113, 114, and 115 are currently amended to define the substrate as a fibrous web or a fibrous nonwoven web. These claims also recite "wherein the second major side of the fibrous (nonwoven) web is at least partially exposed". As discussed above, Wessels et al. only specifies that the first type of surface fastener is useful for changing the arrangement of hook elements. In this first type, the thermoplastic must flow through the pile core sheet to into cavities on the opposite side. In this process both the hook elements 4b and a thermoplastic sheet 4a covering the pile core sheet S are formed. In these embodiments, the substrate is not exposed on the second major side of the substrate. Allen et al. is relied upon in the Office Action to introduce additional layers. Therefore, the combination of Allen et al. and Wessels et al. teaches away from the limitation "wherein the second major side of the fibrous (nonwoven) web is at least partially exposed".

In view of the above remarks, the rejection of claims 71-79, 81-83, 86-90, 92-106, and 108-115 under 35 USC § 103(a) as being unpatentable over Wessels et al. in view of Allen et al. has been overcome and should be withdrawn.

Claims 71-79, 81-83, 86-90, 92-106, and 108-115 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et a1. in view of Allen et a1. and Provost et a1. (US 5,606,781).

Since each of claims 71-79, 81-83, 86-90, 92-106, 108-111, and 113-115 recite a plurality of discrete polymeric regions comprising either a discrete patch of polymer that has a perimeter that is entirely bordered by a first major side of the substrate or a substantially circular patch of polymer, the arguments presented above against the rejection of claims 109, 111, 114, and 115 over Wessels et al. and claims 71-79, 81-83, 86-90, 92-106, and 108-115 over Wessels et al. in view of Allen et al. are applicable to the present rejection as well. Provost et al. does not remedy the deficiencies of Wessels et al. or the combination of Wessels et al. and Allen et al. described above with respect to this limitation. Although the Office Action states that previous arguments with respect to this limitation against the rejection of claims 71-79, 81-83, 86-90, 92-106, and 108-115 were "unconvincing because Applicants did not address in any meaningful manner Wessels et al combined with Allen", Allen et al. has not been relied upon for the limitation of a plurality of discrete polymeric regions comprising a discrete patch having a perimeter that is entirely bordered by a first major side of the substrate. Therefore, Applicants respectfully request consideration of the arguments presented above against the rejection based on Wessels et al. in view of Allen et al. and Provost et al.

Furthermore, in view of claim amendments in claims 112-115 reciting that the substrate is a single-layer, or a nonwoven web or fibrous web with a second major surface that is at least partially exposed, the grounds of rejection in the Office Action stating that the Provost et al. is used to provide evidence that hooks can be integrally molded with a base, can be co-extruded with a base, or can be provided on a thin base a laminated to a different sheet to form a substrate are rendered moot.

The rejection of claims 71-79, 81-83, 86-90, 92-106, and 108-115 under 35 USC § 103(a) as being unpatentable over Wessels et a1. in view of Allen et a1. and Provost et a1. (US 5,606,781) has been overcome and should be withdrawn.

Claims 85, 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et a1. in view of Allen et al./Wessels et a1. in view of Allen et a1. and Provost et al., further in view of Murasaki (US 5,643,651).

Murasaki, like Wessels et al., teaches continuous stripes of hook elements. Since the rejections of claims 71-79, 81-83, 86-90, 92-106 and 108 are overcome by the arguments and amendments presented above, and Murasaki does not remedy the deficiencies of these references, the rejection of claims 85, 107 under 35 USC § 103(a) as being unpatentable over Wessels et a1 in view of Allen et al./Wessels et a1. in view of Allen et a1. and Provost et al. has been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance. Examination and reconsideration of the application, as amended, is requested.

Respectfully submitted,

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